REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 1-5 are currently being amended. Claims 6-10 are being added.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

In the Office Action, claim 3 was rejected under 35 U.S.C. § 112, ¶ 2 as being indefinite. By this Amendment, Applicant has amended claim 3 to be in conformance with 35 U.S.C. § 112, ¶ 2. Applicant therefore requests that the rejection of claim 3 under 35 U.S.C. § 112, ¶ 2 be withdrawn.

Claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by Goellner (U.S. Patent No. 5,590,870). Claim 1 recites that a general purpose hand for a multiaxis manipulator for handling objects comprises a frame member mounted to an arm of the multiaxis manipulator, and a suction holder supported on the frame member and operative to move relative to the frame member. Claim 1 further recites that he suction holder comprises a suction pad to be sucked onto the handled object, a rod member for rotatably supporting the suction pad, the rod member being axially movable relative to the frame member, a resilient member for pressing the suction pad toward the handled object, a first locking mechanism for locking axial movement of the rod member, and a second locking mechanism for locking rotation of the suction pad.

Goellner discloses that a spaced array of work holding fixtures (see Figs. 1-4) are mounted on a platform 90 that can have a horizontal support 91a and a support 91b perpendicular to the horizontal (Figs. 7 and 9, col. 5, lines 54-64). The holding fixtures are therefore fixed to the platform 90. Thus, in contrast to claim 1, Goellner fails to disclose or suggest a frame member mounted to an arm of a multiaxis manipulator, and a suction holder supported on the frame member and operative to move relative to the frame member. Rather,

each work holding fixture is fixedly mounted on a stationary platform 90. There is nothing in Goellner that discloses or suggest the movablity of the work holding fixtures relative to the platform 90. Accordingly, claim 1 is patentably distinguishable from Goellner.

Claims 1-3 and 5 were rejected under 35 U.S.C. § 102(b) as being anticipated by Shimada (JP 59-097886). Shimada discloses that a robot arm 3 is attached to a plate 9 via a base 8. As shown in fig. 2, a head 10 is attached via a ball joint 13 to a rod 11 having a flange 11a. A spring 12 is mounted around the rod 11 between the plate 9 and the flange 11a.

In contrast to claim 1, Shimada fails to disclose or suggest a frame member mounted to an arm of the multiaxis manipulator, and a suction holder supported on the frame member and operative to move relative to the frame member. Rather, as clearly shown in Fig. 2, the position of each holding fixture (i.e., elements 10-13) is in a fixed position of the plate 9. Indeed, given that each holding fixture is mounted to a plate 9, Shimada clearly fails to disclose or suggest that the holding fixture could be moved relative to the plate.

Shimada also fails to disclose or suggest a rod member for rotatably supporting the suction pad, the rod member being axially movable relative to the frame member. As plainly shown in Fig. 2, the rod 11 is fixed in a perpendicular arrangement relative to the plate 9. There is nothing in Shimada that discloses or suggests nor any structure shown that supports the contention that the rod 11 is axially movable relative to the plate 9.

Since Shimada fails to disclose or suggest the rod member being axially movable relative to the frame member, Shimada necessarily fails to disclose or suggest a first locking mechanism for locking axial movement of the rod member. Indeed the reference to elements 3 and 11a has no relevance. Element 3 is a robot arm that is coupled to the plate 9, and has nothing to do with the rod 11. The flange 11 as also has nothing to do with locking the rod 11, but rather with holding the spring 12 in place. The element 14 is evidently used to move the rod 11 up and down and thus locking the vertical movement of the rod 11, but not the axial movement of the rod member as required by claim 1. There is also nothing in Shimada that discloses or suggests a second locking mechanism for locking rotation of the suction pad.

As discussed above, element 3 is a robot arm coupled to the plate 9 and has nothing at all to do with the head/pad 10.

Accordingly, for all of these reasons, claim 1 is patentably distinguishable from Shimada. Claims 2-3 are patentably distinguishable from Shimada by virtue of their dependence from claim 1, as well as their additional recitations. Claim 5 is patentably distinguishable from Shimada for reasons analogous to claim 1.

Claims 1-3 and 5 were rejected under 35 U.S.C. § 102(b) as being anticipated by Neveu (U.S. Patent No. 6,863,323). Applicant notes that Neveu issued on March 8, 2005 based on an application filed on January 29, 2002. Since the publication of Neveu is well after the August 20, 2003 filing date of this application, Neveu is not § 102(b) prior art against this application. Rather, Neveu is at best § 102(e) prior art. Applicants respectfully reverse the right to antedate Neveu at a future date.

Neveu discloses a gripper including socket bearings 4 on supports 5 mounted on profile sections 2, and air chokes 6 are affixed by supports 7 to the ends of the ball joints to enable an angular clearance for the air chokes 6 (see e.g., Figs. 15 and 18-20). As shown in Fig. 4, the bearings 4 include simple ball joints 4a (Fig. 8) or ball joints 4a fitted with springs 4b (Fig. 9) (see col. 4, lines 1-5). The supports 5 are affixed on the profile sections 2 by cooperating with small plates 5a that slide inside of the grooves of the profile section by means of bolts 5b (see col. 4, lines 6-10). To adjust the height, extension pieces 8 (Figs. 1 and 11) are used, and to obtain greater angular clearance than can be provided by the bearings 4, sloped shims 9 are mounted between the extension pieces 8 and the supports 5 (Figs. 1 and 12) (see col. 4, lines 33-41).

In contrast to claim 1, Neveu fails to disclose or suggest a first locking mechanism for locking axial movement of the rod member. There is nothing in Neveu that discloses or suggests anything about locking the movement of support 7 or locking the movement of bearing 4. In the rejection, reference is made to elements 8 and 4b. As discussed above, however, these elements have nothing to do with locking the axial movement of support 7. Element 8 is merely an extension piece for adjusting height and is completely unrelated to the

axial movement of support 7. Element 4b is simply a spring for facilitating the axial movement of support 7, not locking that movement.

Neveu also fails to disclose or suggest a second locking mechanism for locking rotation of the suction pad. As shown in every figure of Neveu that shows the air chokes 6 and the supports 7, there is no rotation of the air chokes 6. Rather, the air chokes 6 are fixedly connected to the supports 7. Since they are fixed to each other, there is obviously no locking mechanism for locking the rotation of the air chokes 6. In other words, if the air chokes 6 do not rotate relative to the supports 7, there is clearly no disclosure or suggestion of a mechanism for locking the rotation of the air chokes 6.

Accordingly, for all of these reasons, claim 1 is patentably distinguishable from Neveu. Claims 2-3 are patentably distinguishable from Neveu by virtue of their dependence from claim 1, as well as their additional recitations. Claim 5 is patentably distinguishable from Neveu for reasons analogous to claim 1.

Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Neveu in view of Uemura et al. (U.S. Patent No. 5,005,277). Claim 4 is patentably distinguishable from Neveu for the same reasons as claim 1. Even if combinable, since Uemura et al. fails to disclose or suggest the recitations of claim 1 that are lacking from Neveu as discussed above, claim 4 is patentably distinguishable from the combination of Neveu and Uemura et al. for at least the same reasons that claim 1 is patentably distinguishable from Neveu.

Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Goellner in view of Uemura et al. Claim 4 is patentably distinguishable from Goellner for the same reasons as claim 1. Even if combinable, since Uemura et al. fails to disclose or suggest the recitations of claim 1 that are lacking from Goellner as discussed above, claim 4 is patentably distinguishable from the combination of Goellner and Uemura et al. for at least the same reasons that claim 1 is patentably distinguishable from Goellner.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date 11/18/05

By [signature] Reg. No. 43,250

FOLEY & LARDNER LLP
Customer Number: 22428
Telephone: (202) 672-5426
Facsimile: (202) 672-5399

/w/ Glenn Law
Attorney for Applicant
Registration No. 34,371